



# RF EXPOSURE EVALUATION REPORT

**FCC ID** : TVE-240501  
**Equipment** : Network Switch  
**Brand Name** : FORTINET  
**Model Name** : FortiBranchSASE 20Gxxxxxxxxx, FORTIBRANCHSASE-20Gxxxxxxxxx, FBS-20Gxxxxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)  
**Applicant** : Fortinet, Inc.  
909 Kifer Road, Sunnyvale, CA. 94086 USA  
**Manufacturer** : Fortinet, Inc.  
909 Kifer Road, Sunnyvale, CA. 94086 USA  
**Standard** : 47 CFR Part 1.1307

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part1.1307 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 1190) and the FCC designation No. TW1190 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full.

Cona Huang

Approved by: Cona Huang / Deputy Manager



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## History of this test report



## 1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Network Switch
Brand Name	FORTINET
Model Name	FortiBranchSASE 20Gxxxxxxxx, FORTIBRANCHSASE-20Gxxxxxxxx, FBS-20Gxxxxxxxx (where "x" can be used as "A-Z", or "0-9", or "-", or blank for software changes or marketing purposes only)
FCC ID	TVE-240501
Wireless Technology and Frequency Range	Bluetooth: 2400 MHz ~ 2483.5 MHz
Mode	Bluetooth LE

Reviewed by: Jason Wang

Report Producer: Paula Chen

## 2. Maximum RF average output power among production units

Mode	Maximum Average Power (dBm)
Bluetooth LE	7.5



### 3. Determination of exemption

Per 1.1307(b)(3), (i) For single RF sources (i.e., any single fixed RF source, mobile device, or portable device, as defined in paragraph (b)(2) of this section): A single RF source is exempt if:

(A) The available maximum time-averaged power is no more than 1 mW, regardless of separation distance. This exemption may not be used in conjunction with other exemption criteria other than those in paragraph (b)(3)(ii)(A) of this section. Medical implant devices may only use this exemption and that in paragraph (b)(3)(ii)(A);

(B) Or the available maximum time-averaged power or effective radiated power (ERP), whichever is greater, is less than or equal to the threshold  $P_{th}$  (mW) described in the following formula. This method shall only be used at separation distances (cm) from 0.5 centimeters to 40 centimeters and at frequencies from 0.3 GHz to 6 GHz (inclusive).  $P_{th}$  is given by:

$$P_{th} \text{ (mW)} = \text{ERP}_{20\text{cm}} (d / 20)^x \text{ for distance } d \leq 20\text{cm}$$

$$P_{th} \text{ (mW)} = \text{ERP}_{20\text{cm}} \text{ for distance } 20\text{cm} < d \leq 40\text{cm}$$

$$x = -\log_{10} \left( \frac{60}{\text{ERP}_{20\text{cm}} \sqrt{f}} \right)$$

$\text{ERP}_{20\text{cm}} \text{ (mW)}$	$0.3 \text{ GHz} \leq f < 1.5 \text{ GHz}$ :	2040
	$1.5 \text{ GHz} \leq f \leq 6 \text{ GHz}$ :	3060

### 4. RF Exposure Evaluation

#### General Note:

1.  $P_i$  is mean the available maximum time-averaged power or the EIRP, whichever is greater, for fixed, mobile, or portable RF source  $i$  at a distance between 0.5 cm and 40 cm
2.  $P_{th}$  is mean the exemption threshold power ( $P_{th}$ ) according to the § 1.1307(b)(3)(i)(B) formula for fixed, mobile, or portable RF source  $i$ .
3. In this report was used Part1.1307(b)(3)(i)(B) perfrom RF Exposure evaluation
4. The distance of 20cm is for this device

Band	Antenna Gain (dBi)	Maximum Conducted Power (dBm)	Maximum EIRP (dBm)	Maximum EIRP (mW)	$P_i$ (dBm)	$P_i$ (mW)	Part1.1307 option(b) Threshold Limit (mW)	Result
Bluetooth	3.57	7.50	11.1	12.79	8.92	7.80	3060.000	Pass

### Conclusion:

According to 47 CFR §1.1307, the device is meet RF Exposure requirement